

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the PATENT application of )  
)  
Jacqueline HUET-OLIVIER, et al. ) Group Art Unit: *Not Yet Assigned*  
)  
Application No.: *Not Yet Assigned* ) Examiner: *Not Yet Assigned*  
)  
Filing Date: February 7, 2002 )  
)  
For: AN IMPLANTABLE SYSTEM FOR )  
ANCHORING STITCHING THREADS ) Attorney Docket No.: 113035.00119  
INSIDE A BONE TUNNEL AND A KIT ) MCG/mas  
COMPRISING IT )

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Before examination of the above-captioned application on the merits, please amend the application as follows:

**IN THE TITLE:**

Please replace the title with the following: --AN IMPLANTABLE SYSTEM FOR ANCHORING STITCHING THREADS INSIDE A BONE TUNNEL AND A KIT THEREFOR--.

**IN THE SPECIFICATION:**

Page 1, before line 1, insert the title --BACKGROUND OF THE INVENTION--;

Page 1, before line 24, insert the title --SUMMARY AND OBJECTIVES OF THE INVENTION--;

Page 2, before line 20, insert the title --BRIEF DESCRIPTION OF THE DRAWINGS--;

10067274-020702

Page 2, line 20, at the end of the sentence, replace the "." with a --;-- ;

Page 2, line 22, at the end of the sentence, replace the "." with a --;-- ;

Page 2, line 24, at the end of the sentence, replace the "." with a --;-- ;

Page 2, line 27, at the end of the sentence, replace the "." with a --;-- ;

Page 3, line 3, at the end of the sentence, replace the "." with a --;-- ;

Page 3, line 5, at the end of the sentence, replace the "." with a --;-- ;

Page 3, line 8, at the end of the sentence, replace the "." with a --;-- ;

Page 3, line 9, at the end of the sentence, replace the "." with a --;-- ;

Page 3, line 10, at the end of the sentence, replace the "." with --; and-- ; and

Page 3, before line 13, insert the title --DETAILED DESCRIPTION OF THE INVENTION--.

IN THE ABSTRACT:

Delete page 15 in its entirety, and replace it with the page 15 attached hereto.

IN THE CLAIMS:

Please amend Claims 3, 5-7, 9, 12, 15, 22-23 as follows:

3. (Amended) A system according to Claim 1, characterised in that the sheath (4) is formed by an annular piece whose distal end (11) is frustoconical in shape, the said piece having an opening (12) with a substantially circular cross-section which passes right through on its longitudinal axis.

5. (Amended) A system according to Claim 1, characterised in that the head (5) has a rectangular cross-section, the lower face (9) of the said head (5) forming an angle of substantially 45° with the longitudinal axis of the sheath (4).

6. (Amended) A system according to Claim 1, characterised in that the head (5) is rectangular in cross-section, the lower face (9) of the said head (5) forming an angle of substantially 90° with the longitudinal axis of the sheath (4).

7. (Amended) A system according to Claim 1, characterised in that the complementary piece (17) is formed by a cylindrical rod (18) whose cross-section is slightly less than the inside diameter of the sheath (4) and the distal part (19) of which is provided in the grooves (20) each intended to receive a stitching thread (2), the said grooves (20) being arranged so as on the one hand to separate the said threads (2) and on the other hand to guide their sliding inside the sheath (4).

9. (Amended) A system according to Claim 7, characterised in that a head (21) is provided on the proximal end of the rod (18), the said head (21) being intended on the one hand to participate in the wedging of the threads (2) when the rod (18) is in its second position and on the other hand to serve as a stop during the positioning of the rod (18) in the said second position.

12. (Amended) A system according to Claim 1, characterised in that the device (1) and the complementary piece (17) are made from one of identical bioresorbable material and not identical bioresorbable material.

15. (Amended) A kit for anchoring stitching threads (2) inside a bone tunnel (3), comprising an implantable system (16) according to Claim 1 and a device (24) for implanting the said system (16).

22. (Amended) A kit according to Claim 17, characterised in that the actuation piece (25) is cylindrical in shape, the diameter of which is substantially less than the inside diameter of the tube (27) and comprises two grooves (37, 38) machined radially on its surface close to its proximal end, the said grooves (37, 38) being arranged to cooperate with a system for locking the translation of the actuation piece (25) inside the tube (27), the said system comprising a pin (39) mounted on a spring (40) which is disposed in the handle (28) perpendicular to the movement of the actuation piece (25) so as to come to be engaged in one of the grooves (37, 38) in order to lock the translation.

23. (Amended) A kit according to Claim 16, characterised in that the distal end (41) of the actuation piece (25) is threaded so as to be able, prior to its arrangement in the tool (26), to associate with it the complementary piece (17) by threading the inside of the head (21) with a hole previously made in it.

**REMARKS**

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with Markings to Show Changes Made**".

Based upon the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for examination. Should the Examiner have any questions or comments, the Examiner is cordially invited to telephone the undersigned attorney, so that the present application can receive an early notice of allowance.

Applicant retains all rights to the subject matter covered by the cancelled multiple dependent claims by making these claims directly dependent on a single claim. The subject matter now not included in these claims may be reintroduced as multiple dependent claims or as separate independent or dependent claims in the present application or in a continuation and/or divisional application.

Please charge any shortage or credit any overpayment of fees to BLANK ROME COMISKY & McCAULEY LLP, Deposit Account No. 23-2185 (113035.00119).

Respectfully submitted,

Jacqueline HUET-OLIVIER, et al.

By: 

Michael C. Greenbaum  
Reg. No. 28,419  
Attorney for Applicants

BLANK ROME COMISKY & McCAULEY LLP  
900 17<sup>th</sup> Street, N. W.  
Suite 1000  
Washington, D.C. 20006  
Telephone: (202) 530-7400  
Fax: (202) 463-6915  
Date: February 7, 2002  
MCG/mas

**Version with Markings To Show Changes Made**

3. (Amended) A system according to Claim 1 ~~or 2~~, characterised in that the sheath (4) is formed by an annular piece whose distal end (11) is frustoconical in shape, the said piece having an opening (12) with a substantially circular cross-section which passes right through on its longitudinal axis.
5. (Amended) A system according to ~~any one of Claims 1 to 4~~ Claim 1, characterised in that the head (5) has a rectangular cross-section, the lower face (9) of the said head (5) forming an angle of substantially 45° with the longitudinal axis of the sheath (4).
6. (Amended) A system according to ~~any one of Claims 1 to 4~~ Claim 1, characterised in that the head (5) is rectangular in cross-section, the lower face (9) of the said head (5) forming an angle of substantially 90° with the longitudinal axis of the sheath (4).
7. (Amended) A system according to ~~any one of Claims 1 to 6~~ Claim 1, characterised in that the complementary piece (17) is formed by a cylindrical rod (18) whose cross-section is slightly less than the inside diameter of the sheath (4) and the distal part (19) of which is provided in the grooves (20) each intended to receive a stitching thread (2), the said grooves (20) being arranged so as on the one hand to separate the said threads (2) and on the other hand to guide their sliding inside the sheath (4).
9. (Amended) A system according to ~~any one of Claims 1 to 8~~ Claim 7, characterised in that a head (21) is provided on the proximal end of the rod (18), the said head (21) being intended on the one hand to participate in the wedging of the threads (2) when the rod (18) is in its second position and on the other hand to serve as a stop during the positioning of the rod (18) in the said second position.
12. (Amended) A system according to ~~any one of Claims 1 to 11~~ Claim 1, characterised in that the device (1) and the complementary piece (17) are made from one of identical bioresorbable material ; ~~identical or not~~ and not identical bioresorbable material.

15. (Amended) A kit for anchoring stitching threads (2) inside a bone tunnel (3), comprising an implantable system (16) according to ~~any one of Claims 1 to 14~~ Claim 1 and a device (24) for implanting the said system (16).

22. (Amended) A kit according to ~~any one of Claims 17 to 21~~ Claim 17, characterised in that the actuation piece (25) is cylindrical in shape, the diameter of which is substantially less than the inside diameter of the tube (27) and comprises two grooves (37, 38) machined radially on its surface close to its proximal end, the said grooves (37, 38) being arranged to cooperate with a system for locking the translation of the actuation piece (25) inside the tube (27), the said system comprising a pin (39) mounted on a spring (40) which is disposed in the handle (28) perpendicular to the movement of the actuation piece (25) so as to come to be engaged in one of the grooves (37, 38) in order to lock the translation.

23. (Amended) A kit according to ~~any one of Claims 16 to 22~~ Claim 16, characterised in that the distal end (41) of the actuation piece (25) is threaded so as to be able, prior to its arrangement in the tool (26), to associate with it the complementary piece (17) by threading the inside of the head (21) with a hole previously made in it.

5

An implantable system for anchoring stitching threads inside a bone tunnel and a kit therefor which includes an implantable device and a complimentary piece in which the device is formed by a single piece of bioresorbable material which includes a sheath arranged to receive at least one stitching thread and a head disposed at a proximal end of the sheath and extending radially from the external wall of the sheath and in which the piece which is reintroduced into the sheath, in a first position, leaves the movement of the stitching threads free inside the sheath and, in a second position, blocks that movement.

**F** **E** **C** **H**